

SCHERMERHORN'S MONTHLY:

FOR

PARENTS AND TEACHERS.

FEBRUARY, 1876.

HOME LESSONS.

II.

ONE of the most serious difficulties which the teacher has to encounter on the threshold, is the determining of the proper length of lessons to be learned at home. It is customary for teachers of some experience to be guided in this by the average ability of the members of the class. But what is the average ability of a class in this particular, and how is it to be ascertained? Sometimes the class is one of remarkable ability, sometimes of as remarkable dullness. If it belongs to the former, the average power of lesson-learning, if it can be ascertained, will be found to rise high; if to the latter, it will be found to sink correspondingly. Let us suppose the class to be a very able one, capable of accomplishing a good deal of home work, and that the average of requirement is based on this; what then becomes of the dull ones who are to be found in every class? It must be plain that it is much harder for them when they are in a class of generally able students, than in one of much less general ability, and it is doubtful whether they can stand the strain. If, on the other hand, the standard of ability in the class is low, the average of requirement will not make demand enough on the abler portion of the class, if in-

deed it does on any but the very laziest or dullest of the number. The danger seems to be that the amount of home work will be graded to the ability of the more able students. The teacher is anxious to get over as much ground as the time will permit, and the younger and more inexperienced the teacher is, the more is he likely to be deluded by this idea of progress. So many pages to-day, so many more in the days to come, and the work is finished.

The truth seems to be that the amount of matter, in any subject, to be mastered at home, is a variable quantity. It varies, as we have seen, in the ratio of the ability of the class, for, though, taking a given number of years with another, it might be found that the average ability would be the same in both periods, the knowledge of this would not help us out of our difficulty. The trouble lies with each individual class, which is quite likely to differ from the one that goes before and the one that comes after. It must, therefore, be treated with especial reference to itself, and not according to an unbending rule. Now nearly all young teachers are under the impression that what they need most of all and first of all, is a knowledge of rules to help them in their work. They feel their own failures, and they attribute these to the want of some invariable and therefore always reliable mode of treatment which they expect to learn from their elder and more experienced associates. The best of all lessons which they do learn by slow degrees, is that no absolute rules can be given which may be blindly followed with success, and that skill and experience really mean the exercise of trained judgment and common sense on the various conditions of the different problems in school life. In the matter of home lessons, an intricate and puzzling problem to the oldest of us, the most that can be done is to point out a few plain considerations that may serve as a guide to enable them to form methods of their own.

A very short acquaintance with the members of the class, will indicate those who generally master the home work. Some reliance may be placed on their statements how long this has occupied them. If the most reliable of these pupils can be persuaded to notice the exact time by the clock, so much the better, for experience shows that very few children do more than guess the time they spend in study. When the arrangements

of the family are of that orderly kind, that requires the children to sit down to their lessons at an appointed time, it becomes still more easy to determine the amount, and, as is sometimes the case when the parent has leisure, if the child's study is regularly supervised, we have a still further safe guide in ascertaining the truth.

But the teacher is not compelled to trust entirely to such means of information. He may ascertain for himself by experiment, under his own eye in the class-room, how long it takes to prepare a given lesson. Nothing can be easier than to assign a certain amount of work, to allow the pupils a given time to learn it, and at its close proceed to hear the lesson so prepared. There are two difficulties, however, in such a process. The one is that no time intervenes between the learning of the lesson and its recitation, whereas a whole night, at least, lies between the home preparation and the school recitation, and the freshness as well as vigor of memory is greatly in favor of that recited immediately after it has been learned. The other is, that silent study must be enforced during the preparation of the lesson, if good order is to be maintained, and to children under 13 or 14 years of age, this silent preparation is generally a task hard enough in itself. The former of these difficulties may be overcome, and the test of time required for preparation be made more certain if the lesson prepared under the eye of the teacher can be recited the following day, with the distinct understanding that no further preparation shall be given to it at home. For the other difficulty there is no remedy, but there is a very important countervailing advantage gained, and that is, the beginning of a training in a most essential element of education, the habit of silent, attentive study.

Excessive home work generally arises from the anxiety of the teacher to pass over a subject with greater rapidity than is necessary. It may also spring from a disregard of the difference between the powers of the child's mind and that of the teacher—a mistake which inexperienced teachers are very liable to make. Both these errors are very serious. The ability to "make haste slowly," the willingness to learn to labor and to wait, the clear consciousness that true knowledge and mental power comes by slow growth, dawn upon a teacher gradually. And it is most difficult to accept cheerfully, what one

must sooner or later accept, the great truth that not the least important part of an edifice is a solid foundation. So with the other error. How difficult it is to persuade young teachers to take short steps with the junior pupils, those only who have had the supervision of numerous assistants can thoroughly understand,—not to remain always graded to short steps, but until habits of attentive study are formed. Perhaps more teachers fail in this particular than in any other single department of class-training. For this reason it is not safe to be guided in the amount of home study by the teacher's running over the lesson. This is apt to prove a most unsafe criterion, unless the time so ascertained be doubled and sometimes trebled for the pupil's benefit.

The greatest and best thing the teacher can do for a child is to form in him the habit of attentive study. It is scarcely necessary to enlarge on this. And yet, it is quite proper to say that such a habit has a value far surpassing that which is associated with it in school-life. Every man, it is true, who labors to train his pupils into careful study of the lesson, anxious mainly for the work in hand, is building better than he knows. But he will be likely to do this very training work none the less better if he thoroughly realizes the far-reaching importance of such a habit. The Grammar may become dim, the Geography may largely drop out of memory, the Algebra may fade away, and disappear in the limbo of "cross x's, and y's," and little of his common school studies remain except the Reading, the Writing, the Spelling, and the Arithmetic, that have been riveted on him by daily use; but if the pupil has acquired at school a habit of attentive, systematic study, it never can be said that knowledge has closed to him her ample page, or that when the school door was shut on him as he passed into the world, the benefit of his school training was left behind. Happy is that youth who has been trained to master his assigned task, who has learned to accept cheerfully his bit of work, and the pleasure of steady application to be closed by the manly satisfaction, "so much is done, I have learned that."

All this is written with a reasonably clear understanding of the educational principle, that the best knowledge is that which is gained by absorption. What has been said is not in

any way inconsistent with this principle. It does not follow that because knowledge is set as a regular task it will, therefore, be so weary a business that it will be accepted only as a necessity for the passing moment, and the benefit cease with the occasion that made it necessary. The most healthy action of the mind in the acquisition and assimilation of knowledge comes from regular and systematic study. It may indeed be begun as a task, but it passes from drudgery to the consciousness of work with reward—that reward which springs up in the mind of every pupil as, sooner or later, he feels that he has obtained some mastery of the subject and a clearer outlook. Nothing can be more fatal to the interests of thorough education than the unfortunate view too prevalent in certain quarters that everything in school training is to be made alluring; that each step onward is to introduce the pupil to some new and enticing view; that because severity was so long the rule; blandishments and persuasion must now take its place. And there is, therefore, the more reason that the teacher, guarding against this most pernicious view, should take care that the children should be taught how to study as well as what to study. In doing this he will find a large field for the exercise of the greatest ingenuity, as well as for the testing of his various plans, and there is no place to try all these better than under his own eye in the class-room. Let him train them to home-work and to self-helpfulness.

Perhaps it would be well for all of us, at times, seriously to consider what are the advantages under which many, very many, of these children labor under at home. In narrow pent up quarters in a crowded tenement house; surrounded by the noises of a large family; compelled to listen to the ceaseless gabble in which they must be more than human if they did not take a part; in the company, perhaps, of vicious parents and elders, without encouragement, and, mayhap, with hindrance, the studies we assign must be pursued by children without habits of abstraction or trained attention. Nor is the picture very different outside of cities. Let us consider also how little we ourselves, with reasonably well trained habits, would be likely to accomplish under such circumstances; how much we are disturbed in the comparative quietness of larger homes by household noises, and cheerful but irritating prattle when we

have some subject of study on hand; how everything must be hushed and subordinated for the time to our necessities; how we must even isolate ourselves, if we can, shutting out whatever would disturb us in our work. It is doubtless a great blessing to be able, amid all common disturbances and noises, to withdraw ourselves, thinking only of the thing before us. But this is both a faculty and a training, and the most of us come far short of it. We may envy Jean Paul Richter, "sitting in a corner of the same room where his mother pursued her household duties, with few or no books about him, but merely with one or two drawers containing excerpts and manuscripts. The jingle of the household operations seemed not at all to disturb him, any more than did the cooing of the pigeons which fluttered to and fro in the chamber." Yet even Richter, with his busy mother and her noises, had peace compared to that state of things under which many children attempt to get their home lessons.

In view of all this and much more that might be added, there is laid upon the teacher the serious responsibility of training the children into habits of attentive study, of showing them methods, and by repetition enforcing and riveting them. For it cannot too thoroughly be impressed on the minds of the instructors of the young that it is not enough to have assigned a lesson of proper length; their duty is not done until they have shown the pupil the way to master it for themselves.

Possibly, also, it may have been shown that the parent does his full duty in this vexed question of home lessons when, after providing a quiet corner for his children to study in, he requires them, with the regularity of a law of nature, to sit down at the appointed time, and to devote, without interruption, the requisite time for the mastery of the lessons. Such an amount of co-operation with the teacher, if it could be obtained in the great majority of households, would work a vast change in that which, without it, is very wearisome labor.

DAVID B. SCOTT.

IN Nashville, Tennessee, as well as in California, no difference is made in the salaries of teachers on account of sex.

PHYSICAL CULTURE.

LIFE, growth, health, and strength, are impossible without physical culture. Without health and strength of body, the mind can be but partially expanded. Activity and vigor of intellect, and acuteness of moral perception depend upon healthy brains, supplied with pure blood.

As the perfection of a function depends upon the vigorous action of its organs, so the integrity and capacity of the entire man, physical, intellectual, and moral, are based upon the entire organism.

Hippocrates, the founder of medicine, makes health depend upon temperance and exercise. Exercise has been found an invaluable agency, also, in curing as well as preventing diseases. And many contrivances and expedients have been devised and prescribed for securing its benefits. Yet exercise, and the laws of health, have been so woefully neglected, that it is quite impossible to find, among all the walks of men, *one* physically perfect man.

No one questions the importance of food, drink, and sleep, at regular and frequent intervals, and of given quantity and quality, as indispensable requisites of life, health, and happiness. Yet, while systematic exercise is no less essential, few consider it of sufficient consequence to require the adoption of regular habits for securing it. Though no one would think it possible to go without food, drink, or sleep, even for a day, with impunity, the majority of people treat exercise as if it could be dispensed with without injury, scarcely ever taking it from any sense of necessity, but only as an incidental matter, as business, pleasure, or inclination may prompt. Hence, as business does not call for physical work on Sundays, the usual exercise on these days is omitted, causing "Sunday headaches," "blue Mondays," sluggish circulation, dyspepsia, and general derangement. Whereas, some sort of physical exercise should be taken as often, and with the same regularity as food and sleep. It should not be neglected on Sunday, or any other day, and *cannot* be, without more or less disturbing the whole physical apparatus, by checking the functional work of all the organs ;

upon the free action of which depend health of body, activity of mind, and cheerfulness of spirit.

Among those who most need regular habits and suitable means of exercise, are teachers and students, because their pursuits are sedentary; and their work being mental, specially requires pure blood and plenty of it; and in many cases their organisms are still in a growing and undeveloped state. Hence, all students, who have not fully attained their physical stature, especially need daily, regular, and systematic exercise.

Among the many contrivances which afford the means of physical culture, we here illustrate a very convenient and

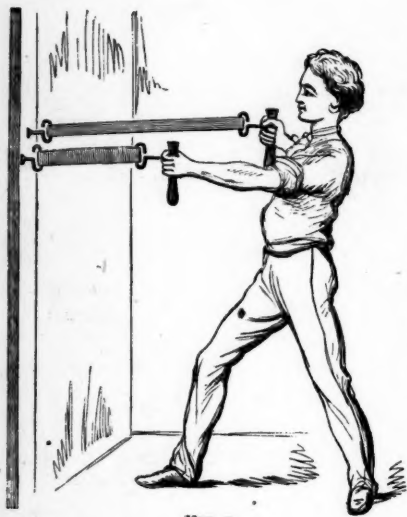


FIG. 1.

effective device, termed the "Chest and Shoulder Developers." It consists of a pair of elastic loops, provided with handles, for grasping them at one end, and suitable screw-eyes, for securing the other extremities to the wall, or to the casings of the door or window. Though the device is simple and cheap, it affords the means for the most important development of the body: namely, that of the muscles of the breast, back, sides, and shoulders, as

well as all visceral organs, and the flexor muscles of the arms.

By using the apparatus in the manner shown in Fig. 1, the muscles of the back, arms, and sides are brought into action.

Fig. 2 illustrates the manner of employing the device for developing the pectoral muscles, as well as those of the arms and sides.

Fig. 3 shows the method of developing the muscles which hold up the shoulders.

These three methods of employing the apparatus strengthen the whole physical system; particularly the muscular walls of the body, the development of which expands the chest, and increases the capacity of the lungs. The torsion action, produced by alternately changing the exertion from one side of the body to the other, develops the muscles attached to the spinal column; which strengthens the small or lower part of the back.



FIG. 2.

This moderate torsion movement also strengthens the muscles of the thorax and abdomen; and gives increased activity to the stomach, liver, kidneys, and other internal organs. The movement and exertion required by using the apparatus as shown in Fig. 3, extends the action from the feet to the shoulders, developing all the muscles which extend up and down the body; and especially those which serve to keep the shoulders elevated.

These varied exercises, afforded by this simple and inexpensive device, while they produce a general development, have a special tendency to expand the chest, strengthen the back, and enlarge the capacity of the breathing apparatus; and to elevate and throw back the shoulders, and to keep the whole body straight and erect; thereby also invigorating and equalizing the circulation of the blood, as well as affording more room for, and an increased action of the entire system of internal organs.



FIG. 3.

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The apparatus is made of various degrees of strength, to adapt it to persons of different ages. For indoor exercise it is cheap, simple, convenient, and effective; and free from the objection of dangerous, accidents that attend some of the other means of house exercise as boxing, fencing, etc. It may be commended as admirably suited to afford moderate and safe exercise for all—men, women, and children.

DR. F. G. JOHNSON.

GEOGRAPHY AS THE STARTING POINT OF SCIENTIFIC CULTURE.

DURING the recent transition period of the Sciences, not one of them has been more completely changed in scope and spirit than Geography.

Beginning, like all the sciences, in a dry registration of facts—a traveler's itinerary filled out with local observations—it has passed into the condition of a true science, dealing with the results of wide inductions, and enriched by contributions from every department of nature-study. Physics, Chemistry, Meteorology, Geology, Botany, Zoology, Sociology, indeed, all the special sciences are largely tributary to, and to a great extent really differentiations of this most comprehensive of the sciences. It is therefore pre-eminently common ground, the best of all fields for the beginning of scientific culture. The materials for investigation are everywhere, and they are neither minute, obscure, nor uninviting. They embrace the everyday conditions of the pupil's environment—the occupations of his parents and neighbors, the elements of his food, the changes of the weather, the forms of plant and animal life ever around him, the scenery about his home. These and other factors of his daily life are factors of geography, and the study of them leads him most directly and entertainingly into the paths of science.

More correctly speaking, should so lead him. Unfortunately, the makers of our school geographies have hitherto failed to appreciate, or to keep up with, the rapid progress of geography science-ward. To them, geography is but little more than the registration of unrelated terrestrial accidents,

of little worth in education, save (doubtfully), for the training of the memory. The really valuable portions of the subject-matter of the science, educationally considered, are slurred over or wholly omitted; while the information given is so presented as to miss its highest usefulness as material for mind development, and the inculcation of scientific habits of thought. Judged from the results, the aim of the many book-makers in this field of labor has evidently been less to give a graphic, suggestive, impressive and intelligible description of what is best worth knowing in regard to the earth and its inhabitants, than to provide a certain amount of geographical matter, cut and dried, for easy handling in the recitation room.

We have said that the study of geography should begin with the pupil's environment. We do not mean with a plan of the school-room, or a sketch of the neighboring fence-lines, but with a real out-of-door study of the geography of the pupil's home—what it is composed of, how it came to be what it is, and what changes are going on to make it other than it is; what has been its influence on the life and industry of inhabitants, how the rocky skeleton affects the contour of the region, that the rainfall and drainage, etc., etc.—matters which the youngest student of geography will take a lively interest in, which will set him to thinking, inquiring and observing, and start him fairly on the way to a real knowledge of the science.

Constructed with this intent, a school geography might begin with any determining feature of local geography, say a simple roadside runnel, fed by melting snow or a passing shower, and led on by rapid yet easy stages to such a complete and coherent development of the elements of the science as would make the pupil an intelligent, and, in a small way, a practical geographer from the start. From noting how the dirt is washed away in some places, and deposited in others, how pools are formed and slowly filled with silt, how, by the wearing down of their outlets, such miniature lakes are drained and converted into miniature plains, and of which lesser hills and valleys are carved by minor runlets, and so on, the transition is natural and easy to the study of the grander processes of earth—sculpture, and the consideration of those conditions of soil and rock, of verdure and barrenness, of wind and

weather, and the rest, which chiefly determine what the character and aspect of a country shall be. At the same time, by direct observation, a lively sense of the influence of such physical conditions upon agriculture, commerce, and other forms of human activity, and a lively appreciation of the nature and value of these leading factors of physical and social geography would be developed in every pupil, without going beyond his familiar home-surroundings.

The next most natural step would be to the study of a good bird's-eye view of some characteristic scene, exhibiting as many geographical elements as possible—hills, valleys, forests, fields, water-courses, roads, telegraph lines, and so on—the pupil to be required to apply his out-of-door observations and experiences to the interpretation of the conditions exhibited in the picture. Next in order would come the equivalent of a bird's-eye view of a large area, a map *in relief*, say of the United States. This would prepare the pupil for the interpretation of flat maps, besides giving a general idea of the country's contour, drainage, and general aspect, in connection with which the influence of all such natural conditions upon the settlement of the country, the employments of the people, the relative prosperity of different parts, the conditions of railway and other modes of communication, etc., should be explained and illustrated at length, not forgetting to lead the pupil to see how fertile areas, water-power, timber-lands, mines, facilities for steam-transit by land or water, and the like, favor rapid settlement and largely determine the social condition and prosperity of the settlers.

Following the study of the country in this way as a whole, its great natural divisions should be investigated in detail; not by a formal repetition of their boundaries, the irregularities of their coast lines, the names of their rivers, mountains, chief towns, and the rest, but by a specific survey of their characteristic features, with special reference to scenic, climatic, productive, commercial, sanitary, and other life conditions. From this point of view a river is important, not solely in proportion to its length and volume, nor mainly either; it is worthy of attention rather for its fitness for navigation, the available motive power it affords, the kind and quantity of fish it breeds, and the fertility of the country it waters; and similarly every

other namable portion of land or water is to be rated (educationally) by its influence upon life, animal, vegetable, and human, and its effect upon social progress and the movements of nations.

Of prime importance at this stage are precise, picturesque, comparative descriptions of typical aspects of sea and land; not polysyllabic definitions, but vivid pictures of scenery, to give definite value to the general terms of the science, and to enable the pupil later on to see, in imagination, the varying appearances of different regions when briefly described.

To the writer, whose training in geography was unusually thorough in the old way, it was left to travel in early manhood to discover that men are human the world over, and the elements of scenery pretty much the same everywhere. Mountains might be higher than those at home, rivers broader, plains more extensive, forests of different foliage, fields with different crops, dwellings of different construction, the elements of scenery differently combined; yet they were everywhere forms which had been familiar from infancy; likeness was found where absolute unlikeness had been expected, and a wide range of false impressions had to be corrected. Such mental confusion and waste of labor would have been impossible, had geography been first learned comparatively, beginning at home.

Having acquired something like a real, though limited knowledge of his own country, the pupil will be prepared to undertake the study of the countries north and south, in other words, the continent as a whole. Any intelligent reader will readily perceive how easy is the passage from our Northern States to the British Provinces, northward; from the southwestern point of the country to Mexico and Central America; and how naturally such extension of area leads to a fuller consideration of climate, its causes and effects, and to a wider application of the methods of comparative geography.

The proper course of instruction being always from the known to the most nearly related portion of the unknown, the next step would naturally be not to South America, but to Europe, that part of the world showing closer resemblances to the United States in climate, productions, people, etc., besides being far more intimately related to us historically, socially, and commercially. Taking typical portions of our own country

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as standards of comparison, the climatic, natural, industrial, and social conditions of Europe could be made intelligible and comprehensible to school children, with far less study than is wasted now on unessential geographical accidents. Europe, too, is a splendid field for illustrating the relations of physical conditions to human progress, and the reflex effects of human action upon physical conditions, such as climate, productions, rain-fall, and so on. Asia is even more instructive, for what it is, what it has been, and what it promises to be in ages to come. The southern hemisphere with its vast undeveloped areas, its regions of death, and spaces of newly awakened life, South Africa, South Australia, and parts of South America, where great nations lie in embryo, furnish material of the most suggestive and instructive character, material wholly unrecognized in text-books, given over to the dull enumeration of geographical names and meaningless details.

And the ocean, those mighty factors of climate and geographical change, those exhaustless reservoirs of food and trackless highways of commerce, surely they merit something more than space on the maps, or so much study as may enable the pupil to name their divisions, great and small, and the useless points of land that break the line of their shores!

Tried by the standard of requirement so hastily sketched, how does the latest and most pretentious of our school geographies meet the wants of our school-children? How far does it recognize the scientific character of geography, and endeavor to develop the science so as to secure its real value as a means of education and practical instruction? This we shall consider in our next monthly.



THE opposition to the public-school system in the late Constitutional Convention of Texas was not able to accomplish as much injury as was at one time feared. The provision made for the support of free schools includes one-fourth of the general revenue, the interest on the school-fund, and the poll-tax. These sources will yield an annual revenue of \$650,000. The State has 60,000,000 acres of school-lands, which are to be sold for the benefit of the school-fund, which will increase it, it is believed, to \$30,000,000.

"PASSIVE" VERBS.

IN English, there is neither a passive nor a middle voice."—*Latham*, "*Hand-Book Eng Lang.*," p. 345.

"The passive voice, as usually named, is a compound of two words representing two ideas. There is no reason for making it a grammatical form."—*I. H. Nutting*, "*Analytical Gram.*," p. 57.

THIS expresses in a few words the truth in regard to the so-called "passive verbs" of English grammarians. No one recognizes such a thing in English as a middle voice. If verbs that are used reflexively are ever noticed as a distinct class, whatever they may be called, they are never said to be in the middle voice. And yet, why should they not? If we have an "active" voice and a "passive" voice, why not conform throughout to the model presented to us in Greek? Would not our grammars then be classical? Gould Brown says very justly,—*Gram. of Gram.* p. 334,—“The classical scholar, being familiar with the forms of Latin and Greek verbs, will doubtless think it a convenience to have the arrangement as nearly correspondent to those ancient forms as the nature of our language will admit.” And it will admit a middle just as well as a passive voice. “This,” he confesses in the very next breath, “is perhaps *the strongest argument* for the recognition of the class of passive verbs in English;”—a virtual admission on his part that we have in reality no such verbs. In Greek a verb in the middle or the passive voice is mainly a *single word* carried through a variety of inflections, just as is the case in what is called the active voice. The same is true, very largely, of the passive and deponent forms in Latin. But the so-called passive voice in English is made to consist throughout of two distinct words, the former of which only is inflected, while the latter is tacked on as an unchanged appendage from beginning to end. That is to say, the truly verbal part of the combination, that in which the assertive element lies, does not convey the idea of passivity at all, while the part which does do this is uninflected and unassertive. Now, if such a combination as this deserves to be called a “passive verb,” surely our grammarians have failed in not recognizing and putting forward a middle voice.

The mere fact that in English the combination *I am loved* is equivalent in meaning to the Latin word *amor*, is hardly suffi-

cient to make the former "a verb" in the passive voice. The most that can be truly said of it is, that it is an equivalent of the latter. Every tyro in Latin knows that there is a large class of words like *fracesco*, *gemmasco*, *pinguesco*, the English equivalents of which are *grow mellow* or *become soft*, *begin to bud*, *become fat*. But this is not deemed any reason for calling the latter forms verbs. So, too, in English, the words *am able*, as in the sentence, "I am not able to go," are an equivalent of *can*; and *must*, in the sentence, "We must go," is an equivalent of *are compelled* or *are obliged*. But, we presume, no one would on this account say that *am able* is a verb, much less an auxiliary verb, or that *must* is a passive verb. If the process of calling by the name of some single verbal equivalent any phrase or expression that is made up of distinct words, having each a meaning of its own, and that may be translated into a single word, whether in our own or in some other language, were to prevail, who can tell to what it would lead or where it would end? It is just this unphilosophical attempt to make English grammar conform, if possible, to the procrustean bed of Latin and Greek grammars that has induced so many to call *more lovely*, for example, a comparative form of *lovely*, or, in the language of the grammars, "the comparative degree," because it is equivalent in meaning and functions to *lovelier*. The same principle formerly prevailed in calling such a phrase as *of John*, for example, the "genitive case" of the word *John*, because it is equivalent to *John's*, or rather because it was the common translation for the Latin *Johannis*. Pursuing the same course a little further, we might say that *many times* is an adverb, *not any* is an adjective, *is to be* is a verb in the future tense, *is like* is a verb, because, under certain circumstances if not generally, these expressions are respectively equivalent in meaning and force to the words *frequently*, *no*, *will be*, and *resembles*.

But, apart from the fact that the English so-called passive verb would be no "verb," in the common acceptation of that term, without the aid of a helping verb that is not "passive," there are other reasons that may be urged against the recognition of passive verbs in English.

It may not be worth while to emphasize the fact that the term "*passive verb*" is a misnomer. Granting that the phrase "to be loved," for example, is a verb, it is no more "passive"

than the verb *to be*, or *to go*, or any other word. What is meant, of course, when we speak of a passive verb is, not that the verb, but that the person or thing spoken of is passive. The same objection may be urged against the term "active verb." Of this, however, we make no point. The name might readily be changed. We object to the recognition of verbs called passive, when nothing more than the participial form that enters into the combination is entitled to the distinction referred to.

In the first place, the recognition and treatment of passive verbs, if they exist at all, belong solely to the province of grammar; but in English the distinction that constitutes what is called a passive verb is purely logical, not grammatical. To illustrate, take the sentence, "The door was shut (*i. e.*, was not open); it was shut by the wind." Here the expression *was shut* occurs twice. In the former instance, it would not be parsed by a discriminating grammarian as a passive verb. It conveys no idea whatever of action, but expresses simply the condition of the door as not open. *Was* would be considered an individual verb, and *shut* a participle or possibly an adjective. In the latter instance, the combination would probably be called a passive verb, because the word *shut* conveys the idea of something done to the door. The two words would be taken as one. And yet, in a grammatical point of view, there is no ground for this distinction. The relation of the words to each other and to other words in the sentence is precisely the same in both instances. This will be fully apparent if we take such a sentence as the following, in which the word *drunk* is used but once, and as both a participle and an adjective: "If a toper and a gallon of whiskey were left together, which would be drunk first?" The pleasantry of these words, of course, lies in the double meaning involved in the word *drunk*. Either, on the one hand, to call *would be drunk* a passive verb, or, on the other, to take *drunk* as an adjective, would rob the sentence of its point. The only thing to be done here is simply to consider *drunk* as the complement of *be*, acting the double part of an adjective and a participle. The only difference in the two words (as such forms may be called, though spelt alike), is a difference in meaning, a logical difference. And the point we make is that a mere logical difference between words or forms is not sufficient to establish a leading grammatical distinction.

If, for example, in the sentence, "The door was shut by the wind," the expression *was shut* constitutes a verb, then, in the sentence, "We found that the door was shut," referring to the condition of the door, the words *was shut* should be taken together as a verb. If the former is properly a passive verb, then the latter might be considered as an impassive or non-passive verb,—a verb denoting mere condition. But this, we presume, is more than most persons are yet ready for.

The following examples—a few out of many that might be given—are added to illustrate still further the difference between so-called passive verbs and what we will call non-passive verbs. "The man *was mistaken* by the crowd;" "He *was mistaken* in his supposition." "He *has been seen* every day;" "He *has been gone* an hour." "He *was disappointed* by his friends;" "He *was disappointed* in his expectations." "The combatants *have been parted*;" "A fool and his money *are soon parted*." "Everything *has been prepared*;" "Are you *prepared*?" "Mary *is loved*;" "John *is tired*." "The pipes *are fitted*;" "Mountains and lakes *are fitted* to educate a poet." It is clear enough that there is a logical difference between the italicized words in each of these pairs. And yet grammatically there ought to be no difference in the general treatment of all these expressions.

In further exemplification of the fact that English so-called passive verbs are purely logical, take such examples as "She *was seated* (= sat) by the window," "A vast metropolis *is calculated* (= tends) to make men selfish," "Some words *are composed* (consist) of three parts."* A tread-mill grammarian would naturally call these italicized words passive verbs. But their logical equivalents, standing within the parentheses, show that they possess no passivity of mean-

* Reference to a good defining dictionary may enable any one to swell the number of such examples almost indefinitely. Open Worcester's quarto dictionary, for instance, at the word "STAND, *v. n.*" Definition 3 you will find to be, in part, "Not to be demolished, subverted, or overthrown." Def. 4, "To be placed or situated." Def. 12, "To be placed with regard to order or rank; to be ranked." Def. 19, "To be approved or acquitted." Def. 20, "To be placed," in the sense of a verb in the "middle" voice, "to place one's self." Def. 23, "To be satisfied or convinced." Def. 25, "To be exposed." Def. 29, "To be directed." Similar definitions for a large number of intransitive verbs may be found in almost any dictionary,—definitions which in form are "passive," but in reality are not.

ing whatever. In form they are "passive verbs," but logically and really they are intransitive (or, in the language of classical nomenclature, deponent) verbs; that is, if the name of "verb" is to be given to the combination at all. But we never yet have heard of any one calling *was seated*, for example, an intransitive verb. Why not? Not because it is not logically such; but because the grammars do not authorize such a name for such a form. Their teachings, on the contrary, imply that it is a passive verb. Hence, perhaps nine out of ten call it such!

Then there is, on the other hand, a class of verbs like the following: "*Magnesia feels smooth*;" "*The field ploughs well*;" "*That house looks familiar*;" "*Corn and oats sell readily*." These verbs do not denote any action on the part of that which their subjects severally represent. That is to say, *magnesia* does not do any feeling, or the field any ploughing, or the house any looking, or the corn and oats any selling. On the contrary, these several objects are passive, they are "acted upon." If, therefore, Gould Brown's definition of a passive verb, and that of those who agree with him, is correct, or intentionally so at least, namely, that "a passive verb is a verb that represents its subject, or what the nominative expresses, as being acted upon," then these verbs are passive. And so some consider them. Boyd, for example, in his "*English Composition*," p. 71, says, "On what principle do we justify such expressions as '*The verses read well*,' when an external agency is applied to the verses, and they in fact *are read*? Clearly, in such a case *read* is an imperfect passive verb.... The agency in these cases is external, and the object does not act, but is acted upon." But this is a very different class of words from the combinations that commonly pass under the name of passive verbs.

As usually understood, these are compounded of the verb *to be* and the passive participle of some transitive verb. But, just here, it might be asked, Why limit them to compounds of *to be*? Is not *lies buried*, for example, or *seems injured*, or *becomes obscured*, just as truly a passive verb as *is buried*, or *is injured*, or *is obscured*? If not, can any reason be given for it except the dictum of grammarians? The idea of passivity is not found in the word *is*, any more than in the word *lies*, or

seems, or *becomes* ; while these last words express all that the word *is* expresses, and something more. These forms, in fact, may generally be translated into others containing the word *to be* and some qualifying word or phrase, as *seems injured* into *is seemingly injured*, when *is injured* at once appears as an orthodox "passive verb," while *seems injured* must share the fate of words generally, and its component parts be considered separately!

Again, this idea of a passive verb strictly speaking excludes from the category of passive verbs a class of compound forms like *is beloved*, *was unheard*, *was unadored*, *were unknown* ; for we have no such verbs as *to belove*, *to unheard*, *to unadore*, *to unknown*. And yet grammarians recognize these participial forms when preceded by some form of the verb *to be* as true "passive verbs."

Grammarians are also generally agreed in holding that all transitive verbs have a passive voice. The idea is, that every such verb has both an active and a passive voice. But this is an error. Even granting that English verbs have a passive voice, there are a number of transitive verbs that have no passive. Among these are the words *accustom*, *become*, *behave*, *cost*, *demean*, *lack*, *misbehave*, *resemble*, and a number of others. Though we can say, "He was accustomed to do so," *was accustomed* is no more a passive verb than its equivalents *used*, *was wont*, *was in the habit of*.

As already observed, a passive verb is defined to be a verb whose subject denotes something acted upon. Are no verbs, then, passive except those which have subjects? Suppose it is said, "The house used to be owned by the judge," or "You ought to be compelled to do it," or "The bread is not fit to be eaten;" are the "verbs" *to be owned*, *to be compelled*, *to be eaten*, not in the passive voice? Or do they need to have the preceding word or two taken with them in order to make them passive verbs?—thus, *used to be owned*, *ought to be compelled*, *is fit to be eaten*. This alone, so to speak, will put them in communication with the subject. In other words, it is only the introductory word of these expressions that is commonly regarded as having a subject. But, if the passive participle at the end of each expression is a part of a passive "verb," and that verb has a subject, then the whole combination must be the

verb. Indeed, we see no reason why *ought to be compelled*, for example, is not as truly a passive verb as *should be compelled*. And, if this is one verb, why are not such combinations as the following individual verbs?—*used to be owned*, *is fit to be eaten*, *is to be wondered at*, *may be said to have been born*, etc., etc.

Our subject is by no means exhausted, but we fear that the reader's patience is. We will conclude, therefore, by briefly stating and exemplifying what we believe to be the true mode of treating English so-called passive verbs. It is merely to consider the participle as an adjunct or complement of the verb, precisely as if that verb were something else than *to be*, and the complement were an adjective instead of a participle. Nor does it matter whether the participle is "active" or "passive,"—ending in *ing*, or ending in *ed*, *en*, or some other of the participial terminations of irregular verbs. To illustrate, we give a few examples:

1. The man *was concealed* by the rubbish.
2. He *is called* John.
3. He *was beloved* by all.
4. The man *is possessed*; he *is determined* to go.
5. *Is the gentleman done*? His companions *are gone*.
6. The heavens *became obscured*.
7. The man *lay hidden* all day.
8. The boy *is sick*; he *is afraid* of you.
9. The books have sold and *continue selling* well.
10. The men *must be kept employed* all day.
11. He *was laughed at* for his eccentricities.
12. Mary *is singing*.

In none of these sentences do we see anything that we can call a passive verb. In the first three, the fifth, sixth, seventh, tenth, and eleventh, we see what may be called, though with questionable propriety, "passive" participles. In the fourth and eighth, are what are called adjectives; and in the ninth and twelfth, "active" participles. All these words, however, we view alike as complements of the verbs they follow. The tenth and eleventh examples differ from the others in having the assertive element completed by more than one additional word. Thus, in the tenth, *employed* is the complement of *kept*; *kept employed* is the complement of *be*, and *be kept employed* that of *must*, which contains the assertive or wording element

—the “verb” proper—of the entire combination. Just so, in the eleventh example, *at* completes the participle *laughed*, and *laughed at* completes the verb *was*. There is a simplicity, a universal applicableness in this treatment which the passive-verb plan cannot claim. It does not require one treatment for the first example and others like it, and another for the fourth, and another for the fifth, and still another for the sixth, and yet others for other cases; but one treatment serves all alike, and equally well. Take, for instance, the sentence, “The child is dead and buried.” Instead of making *dead* an adjective relating to *child*, then taking *buried* and coupling it with *is*, and calling it a passive verb, we say *dead* and *buried* (the one an adjective and the other a participle if you choose) are alike complements of the verb *is*, performing grammatically one and the same duty in the predicate of the sentence. So, too, *silent* and *deserted*, in the sentence, “The neighborhood remained silent and deserted,” are complements of *remained*, as they would be of *was*, if this word instead of the word *remained* preceded them. In such a sentence as “The entire sum was and remained invested,” the last word completes the two preceding verbs alike, and forms no passive verb with either of them. If it does with the one, we see no reason why it should not with the other.

S. W. W.

A NOVEL BILL.

ONE meets with many curious things who peers into the old church registers of England. This, in the Record Office of Winchester Cathedral, dated A.D., 1182, is certainly unique. It is a paid workman’s bill, and this is a literal copy:

FOR WORK DONE.		<i>s.</i>	<i>d.</i>
In soldering and repairing St. Joseph.....	o	8	
Cleaning and ornamenting the Holy Ghost	o	6	
Repairing the Virgin Mary and cleaning the Child ...	4	8	
Screwing a nose on the Devil, putting in the hair in his head, and placing a new joint in his tail....	5	6	

THE OBJECT LESSON.

ON TURTLES—*Begun last Month.*

NOW let us proceed with the lesson. Willie Harwood, will you step up to this wall map of Florida? * Look for the Keys or little rocky islands around the lower end of the peninsula. Do you see the Dry Tortugas there? If you do, point them out. These islets are formed of coral, and have risen above the water, and the sand has been washed up on them by the waves, so that they are beds of sand; the sand being three or four feet or more in depth; the turtles come in great numbers, and crawl up on these sandy islets, and with their hind flippers work out a hole in the sand and there lay their eggs, 120 to 160 in number, and then cover them over with the sand, working very hard to smooth the sand over, so that their nests will not be discovered. None of the turtle tribe ever brood on their eggs; they could not on account of their breastplates. These great turtles, weighing from 100 to 800 pounds, are called green turtles, perhaps because their color is a kind of olive green, but more likely because of the green fat which they have, which is very good to eat." "Oh! Miss Lee," interrupted Harvey Wood, the son of the village banker, who had been once or twice to New York with his father, a fact which he liked to tell, "I know about the green turtles. When I went down to New York with my father, last fall, we went to Delmonico's, and father showed me at the door a great greenish turtle shell, and when we went in he ordered green turtle soup and steak, and when it was brought on he said, 'Now, Harvey, this is what the aldermen eat, so you must eat it and like it;' at first I thought I wouldn't like it, it looked so dark and the little green lumps which swam in it seemed so queer; but father said that was the green fat, and it was the best of it, and when I began to eat it it was real good, and so was the steak, but I thought the steak was chicken." "Well, Master Harvey," said Miss Lee, smiling, "perhaps if you eat green turtle you may get to be an alderman yourself when you grow up, who knows? The way these green turtles are caught

* See frontispiece to our JANUARY MONTHLY.

is very simple ; the sailors who are engaged in taking them, go on shore on these islands and wait till they have laid their eggs, and then as they are returning to the water they take a stout heavy stick, a handspike, they call it, and, putting one end under the under shell, turn the turtles over on their backs. On land they cannot turn themselves back again, and so when the sailors have turned over as many as will load their boats they drag them with ropes, still on their backs, to the shore, and there lift them into their boats, from whence they are hoisted by tackle on shipboard. The sailors have to be very careful, for if the turtle is lifted so carelessly that its flipper can get a hold upon the sand, it will right itself and make for deep water instantly, taking the sailor with it if he is caught in the rope. When they are brought to our large cities they are often kept some time before they are killed and eaten.

"These islets are called Tortugas, Tortuga being the Spanish for turtle. There are other islands in the West Indies which Master Willie will point out to you, which are also called Tortugas, from the turtles found there. There are other sea turtles still larger than these, but not so good to eat ; the flesh of some of them, indeed, is very coarse and strong. The Mediterranean turtle is very large, weighing twelve hundred to two thousand pounds. How much is that, Georgie Harris?" "A ton, ma'am." "Right, my boy ; but this great fellow is not hunted, because his flesh is not good ; then there is the East India or edible turtle, which is very good. The Logger-head turtle, a great awkward fellow, not very plenty nor of much value ; the Hawksbill, which lives in the Indian Ocean and furnishes the finest tortoise-shell, and whose flesh is very good also. Hardly any of the other sea-turtles furnish very good tortoise-shell. Mr. Darwin says that the islanders put burning charcoal on the backs of these poor turtles, and when the shell curls up pull it off and put it under pressure till it becomes flat ; they then let the turtle go. This is very cruel and wicked. There are also what are called Leather-back turtles, whose buckler or upper shell is more like leather than like shell. Now, Master Willie, go over to that map of the Western Hemisphere and find the Galapagos Islands. You do not know where to look. Susie," said Miss Lee, to a bright-eyed little girl, the smallest in the school, "you can tell him where they are." "Yes, ma'am," said Susie, "S. W. of the

Isthmus of Panama." Willie soon found them. "Now," said Miss Lee, "we will find out something about the great tortoises. The name Galapago means tortoise, and the Galapagos Islands are Tortoise Islands. There are considerable numbers of the great sea turtles like those at the Tortugas, but the number of the tortoises is much greater. They are very large, weighing from 500 to 1,200 pounds, and are very strong. They live on vegetable food entirely, eating the juicy cactus, the leaves of trees, and some of the grasses and mosses. They are very fond of water and will travel with great labor at the rate of about four miles a day, to the springs in the hills, sometimes fifty to twenty miles away, to obtain it; they stay at these springs two or three days, drinking very often and very large quantities at a time, and then return to their places at the foot of the hills. They make regular and beaten paths in their journeys. They are captured for their flesh, which is excellent and furnishes the greater part of the meat for the people of the islands. Their eggs are larger than a hen's egg, and are very much liked.

"But the greatest places for turtles are on the Amazon river and its branches, and on the Orinoco river. Master Willie, point out on the wall map the Amazon river, the Napo river, the Madeira, and then turn to the Orinoco river—very well; I wish you all to know where these places are where the turtles are so plenty. All along these rivers, and especially the upper Amazon, the Napo, the Madeira, and the Orinoco, there are millions of these fresh-water turtles, of large size, and possessing greater activity than those of the sea or of the Galapagos islands; they come on shore, crawl up on the sands a hundred feet or more, dig a hole with their hind feet, two or three feet deep, and lay from one hundred to one hundred and sixty eggs, which they cover with sand. There are so many of them that they will often dig up each other's eggs, and the whole shore is covered with them several inches deep. They are a little larger than a hen's egg, but perfectly round. These are collected by the Indians and broken up in large boats or troughs by the feet of men; water is added and the oil rises to the surface, and is skimmed off, heated in copper kettles, to make it pure, and then put up in twelve-quart jars. The flesh of these turtles is excellent, and they are sold in all the markets.

"Now let me see who can tell me what these great turtles and

tortoises are caught for. Hattie Smith, can you tell?" "Most all of them for their flesh, ma'am." "And which of them have the best meat? Joseph Steele may answer." "The green turtles from the Tortugas, ma'am." "And which the next?" Eddie Jones puts up his hand—"The great tortoises from the Galapagos Islands." "And are there any others, Eddie?" "Yes, ma'am, the Hawksbill turtles, and the Fresh-water turtles, in the Amazon and Orinoco rivers." "Well answered; now who can tell what else they are good for?" Idle Dick had not forgotten about his mother's comb, so he answered, "The Hawksbill turtles in the Indian Ocean yield tortoise-shell, and the rascally niggers"—"No," said Miss Lee, "not negroes; those islanders are nearer Malays than negroes." "Well," said Dick, "those rascally islanders put hot coals on the poor turtle's back and when the shell curls up pull it off; I guess I don't want any tortoise-shell knife-handles after this. Does this shell ever grow on again, Miss Lee?" "Partially, I believe; but it is so thin that the poor turtle seems sickly after it. It is very much like the Indians taking off a scalp; it may heal over, but the man will feel the want of it all his days. But there is one more use to which the turtle is put; what is it?" "Its eggs yield oil," said Minnie Havens. "And where are they collected for that purpose?" "In South America, along the Amazon, the Napo, the Sherry." "Not quite, Harvey," said Miss Lee, for it was Harvey Wood who answered so promptly; "I am afraid you have mixed the wines a little at your alderman's dinner; it was the *Madeira* and not the *Sherry* river where the turtles' eggs were so abundant." "And the Norimoco, too; wasn't it," said Idle Dick. "You are slightly wrong, too," said Miss Lee, "it was the *Orinoco* instead of the *Norimoco*, as you will see by looking at the map. And what use did I say was made of this oil?" "It was for lights," said Nettie Johnson. "And for machinery," said Johnny Peters, who was quite a boy mechanic; "And for cooking, the best of it," said Sally Wilson, a quiet, motherly little girl, whose highest ambition it was to become a good housewife.

"I am glad," said Miss Lee, "that you have all paid such good attention, and remember so well what I have told you. There is much more yet to be learned about turtles and tortoises, but we will for this time close our OBJECT LESSON.

CHILDREN.

WHEREVER grass will grow or sun-beams creep, there we find them in our homes, in our schools, in our churches, in places of public amusement and in the street. In this last place they swarm like bees. Troops of gayly dressed soldiers train; troops of gayly dressed misses promenade. Here the boys assail your feet with their marbles or direct your eyes to the bright sky to see a paper kite among the clouds. Here the girls roll their hoops in your path or, mother-like, thrust their dollies in your face for admiration. You turn aside that you may not come in collision with a boy "hop scotching" on one foot, or to dodge a ball flying through the air impelled by a play-fellow's bat. Farther on little girls are playing "Lift the gatés as high as the sky," and "Chickany chickany, craney crow," effectually blockading the streets. Hastily making way for a baby-cart, you barely escape being lassoed by the jumping-rope of a light-footed miss on the other side. A little orange peddler upbraids you for upsetting his precious basket, while a news-boy thrusts a paper in your face, and a small rollicking Jim Crow turns somersaults in your path. It is a beautiful sunshiny day, and "school is out," releasing the sprightly, saucy Irish boy; the slow, patient, obedient German boy; the calculating, oval-faced Hebrew boy and the intelligent, fast American boy.

There are children who set at defiance all laws of health, and flourish in badly-ventilated cellar-homes. There are puny children who toil day and night; who stagger beneath burdens "too grievous to be borne," who have never known an hour of unalloyed pleasure. There are gaudily dressed children who, in a life of luxury, have lost all simple child-pleasures,—or rather have never known them—and who, before they have reached the stature of men and women have exhausted the round of fashionable amusements. There are children whose scanty, but well-kept clothing and thin faces mark them as the virtuous poor, living with pinching economy. There are children whose beds are bundles of rags, who would be frightened at clean sheets, who have never learned "Our Father," who hear every day oaths, abuse, and the confusion of drunkenness. There

are children who would not take a pin without asking and who dare not sleep without prayer.

From this material, great and fearful in its variety, must clergymen be called, judges appointed, presidents elected, a nation be made; and these are they who will fill our poor-houses, jails, and penitentiaries; and all or nearly all of these first gather in our public school, from the portals of which each takes his separate diverging path. From this fearful variety teachers must receive, not choose, their material—the boy from the cellar with his blunted sensibilities, unable to comprehend kindness, the imperious little gentleman astonished at your firmness, the gentle conscientious child, punctilious in duty anticipating your wishes, the mischievous urchin who seems never to have had a sober thought, all these must assemble together and inter-communicate good and bad; all these different dispositions must be subject to the same general form of government and mode of instruction. Not only the mental but the moral and physical being of each child must receive stimulus, life, vigor, and development from the teacher, who receives in return ill-will or indifference; perchance gratitude and love.

What wonder that the earnest heart sometimes fails; that the teacher longs to select the few appreciative and teachable ones, and reject their unfortunate companions, who are evil mainly through the faults of those whom it is their duty to obey? It is well for them, well for the world that teachers may not choose. If children are not the angelic beings pseudo-philanthropists would have us believe, they are yet but miniatures of the adult world, from which they learn all the evil as well as all the good they know. They are keenly sensitive to real kindness and will soon discover whether you are a friend from policy or from principle; and if they are with difficulty brought to trust in you, it is a sure and painful evidence of the deception to which they have been so early and so cruelly subjected. To every deceitful child there has been a deceitful teacher; it may have been a parent or a guardian, or an associate,—yet, nevertheless a teacher,—and the child, if not convinced of the reality of humanity-loving honesty, and thoroughly imbued with it, will perpetuate the cruelty. It may require a long time and much patience to convince such children of your real sympathy, and even when their hearts are secretly moved,

they may have learned from their elders to conceal the change to submission; but once your friends they are your champions and will defend even your faults.

Who is proof against the sympathy of children? When you were sick and discouraged, or when the black-edged letter came and you bowed your head upon the desk, even when your heart was full of agony, could you fail to note the hush of silent sympathy that reigned in the lately buzzing room, or the little groups here and there on your path home, forgetting to play, yet with innate delicacy forbearing to question, or even trouble you with their pity? Did you not hear, as they gathered close out of your path, childish whispers of, "It is too bad?"

Ah, well it is for the world that there is in it this element of child-life. There are old children; thank God they are comparatively few! For the most part their little faces shine with happiness; their little feet patter like the musical rain-drops of a summer shower; their clear unshrinking eyes challenge our innocence like the stars in the blue sky; their little hands cling to ours with a confidence that shames us if ever we have betrayed a friend; and one and all call us with their sweet voices to lead them to a higher, holier place. God grant that none shall lead them down instead.

M. L. SHERMAN.

*A CLAM'S STOMACH.**II. ANIMALCULES.*

WE have now to notice other "finds," in the digestive sack of *Mya arenaria*. Their number is very great, and very diverse are their forms. In truth, any attempt to describe them after the manner of the systematist, would at once launch us into an entanglement of names in sense and sound most formidable. In this respect our former story was comfortably told, as really but one object was evolved, and that under the well-known name of sponge. Although to our distaste, we must now confront a few really hard terms. The objects we are now observing are usually called animalcules, a word conveying no clear or distinctive significance. They are known to science mainly as Diatoms and Infusoria. The

species seem numberless, yet, strange to say, one must look far to find an individual among them owning a trivial or popular name. So there is no help for it if, occasionally, a strange or technical word must occur.

With this understanding let us set ourselves seriously to work. Upon a clean slip of glass a fresh dot of substance is put from the stomach of our bivalve. It is of the consistence of cream, so we thin it down by adding a drop or two of clean water. A glass disk, as large as a three-cent piece, and so thin that were a hundred of them placed one upon another, the pile would not be more than an inch high, is laid upon this little dot. This spreads out the matter thinly upon the glass slip. Let us first try a low power lens. Ah, an elegant object is in the field. It is very narrow, if we compare the width with the length. Each of the two slightly sigmoid curves which bound it, is remarkably suggestive of Hogarth's line of beauty. These sigmoidal curves, however, are not parallel, as the object which they bound is pointed at both ends. With a higher power we find that this graceful object has a line, or keel, running its entire length midway of the two curves. It also has a little prominence, or nodule, at the center, and a much smaller one at each end. It is a *Pleurosigma*, or as now known, a *Gyrosigma*, and belongs to the *Diatoms*. This word *diatoms*, which is a bit of barbarously compounded Greek, means "cut-in-two," as a diatom is always composed of two parts. Another object now under the microscope is very prettily marked. It has an oval outline, somewhat pointed at each end. It is a *Pinnularia*. Here, too, is a median line, with a nodule in the center, and one at each end. But on each side of the central line is a series of very fine transverse lines, simulating feathery spray. The word is from the Latin *pinnula*, a little feather; and it really means the feathered diatom. We move the slide again. Now two objects are in the field. Though differing in some respects, each looks like a little flat boat, whose greatest width is precisely in the middle, from which there is an equal narrowing towards each end. Their generic name is *Navicula*, which means a little boat. Here I can detect no motion—probably, these are dead. But elsewhere, I have watched the living specimens, and have seen them move so quietly, one while advancing in a straight line,

and then without turning round at all, taking a directly contrary course, with the same ease and quietness which marked the advance movement. The mystery of it all is that one does not see any locomotive organs whatsoever. Everything about one of these little flat deckers is perfectly concealed, and the movement is not unlike that of a monitor in miniature.

The slide is again moved upon its stage, and an ungainly object comes upon the field. It is constructed with the round bow of the ancient galleon, only it has two of them, one at each end. It is also constricted at the middle, so that if it were not flat, it would pass for a dumb-bell. Here is another object, something like a cylinder, but greatly bulged at the middle. At first sight it is suggestive of the twine-stick which a boy uses when flying his kite. But there is considerable delusion here. More careful inspection shows that it is not cylindrical, but flat. Fortunately alongside is another one, turned up edgewise. Suppose two fruit-dishes, in all respects alike, and each of an elongated form, with the edges sculptured into wavy or serpentine lines. Let them now be set together, edge to edge. The under sides would thus be turned one from the other in such a way that if looked at on either side, a plain surface would be exposed. If now they are set so as to be viewed edgewise, the pattern of the edges would be seen in duplicate, and the line or space of separation, would be both ornamental and symmetrical. So with this singular diatom; seen edgewise, it is much prettier than when seen in the flat. This, however, is far from being the rule with these strange little objects.

We have now in the field of the microscope an object much resembling a little column. Each joint, or section, is quite pretty, although somewhat quaintly sculptured. Suppose something should run a tilt against this column as it lies on the soft mud. Would it break and separate into pieces. Oh, no. It might seem to break, but here, in several ways, appearances are deceptive. It really is not a column, but rather a pilaster, for it is flat. Hence the joints or segments are, after a manner, square. The joints are also attached somewhat like those of a carpenter's rule, only the connection is at their diagonal corners—that is, the right-hand upper corner of one joint is united to the right-hand lower corner of the one above it, or

resting upon it ; while this upper segment of the pilaster, so to speak, has its upper left-hand corner united to the lower left-hand corner of the segment resting upon it—and so on for the series of segments, or united frustules of these jointed diatoms. And this so queerly jointed thing can move ; yes, even travel. Has this strange little being any will ? If not, how is brought about this unison of movement in all the parts of a structure so strangely hung together ? “ Oh,” says one, “ it is automatic.” Indeed. But is not this darkening counsel by words without knowledge ?

The objects just passed in review are known as diatoms. In life their movements are interesting, and sometimes their forms have a certain elegance. But their true beauty is seen only after death. This is found in their singular skeletons, which are composed of silica. So exquisite are their patterns and so minute and delicate the details of their sculpture, that sometimes the very best lenses fail to evolve the entirety of the design.

But in our search we found some objects that were purposely unmentioned, in order that these diatoms might be treated first. In recalling these we shall find our attention drawn to an entirely different tribe of living things. Here is one of them. In form it is just like a round felt hat with the rim torn off. It is now presented side-wise, and, unfortunately, one cannot turn it up, so as to look inside ; still, it is so transparent that one can partly see through it. What now ? Why it looks like the cap of a boy who has been stealing apples. Certain round bodies, or, maybe, hollow spheres, are easily discernible inside. There seems to be some movement among them. These internal bodies, the famous Ehrenberg regarded as stomachs, and he named the little beings so organized *Polygastrica*, or the many-stomached animalcules. Now, unlike the diatoms, which have siliceous skeletons and are rigid ; these objects generally have no skeletons, and are flexible. This one is an infusorium. As we have shown, the skeleton of the dead diatoms is more beautiful than the living form. Not so with the infusoria. They are scarcely aught else than protoplasm. After death comes decay, and their beauty fades away. The name of this infusorian I cannot tell, I almost fancy I can see a slow pulsation of the whole structure ; and where should be the rim of

the cap is a hazy frill of tremulous light. It is caused by the rapid play of numberless cilia or fleshy hairs, whose incessant motion sets the cap-like object to slowly revolving, the brim moving like a wheel in the water.

But here is something which is really rich, rare, and *recherché*. Its suggestions are odd, and yet its beauty is exquisite. In contour it resembles an Indian cooking-pot. But, for the sake of poetry and dignity, we must get away from that aboriginal culinary utensil. Suppose a perfect sphere, with a small segment cut off from the upper side—That is the form precisely. Now, around the edge or circle which bounds the plane left by the segment is a pretty frill seemingly made up of many rows or strings of beads. Inside this is a crater-like depression. It is rather dark there, and we cannot get the object in position so as to look down into it. See! the round pot is turning over—we mean this spherical object. Now that beautifully sculptured frill is entirely out of view. But what set this ball a rolling? Let us look sharp. There is a hazy circular movement in the water, of which this living sphere is the center, as if it were in a halo of tremulous light. There seems to be a whirl, as of a vortex, and yet it is not quite definable, and to many, even with the microscope it would be indiscernible. We will change the lens, and see if our George Wale immersion will help us again. Now, after a good deal of patience the immersion is in focus. The thing is all plain. That flexible living sphere is beset with cilia; as these are in rapid motion, a vortex is generated, in the center of which the object slowly revolves. We behold too, borne irresistibly into this tiny whirlpool, animalcules so small that we cannot even in fancy assign them any forms.

From this interesting stranger we turn to a new object, which although not so beautiful has a life story that glows with anomaly and wonder. It is evidently a Rhizapod, the linear projections resembling fibrils; hence the word, which means root-footed—and as these projections would suggest rays to some, it looks a good deal like an Actinophrys. The object is spherical, and these profuse ray-like lines, are but linear out-comes of its own sarcod, or gelatinous self. These lines are very prominent, and they can become lax or stiff at pleasure. It is also supplied with cilia, as may be

guessed from the circular mist, or aureole which surrounds it. The ray-like extensions are called pseudopods, or false feet, because, at the will of the creature, they sometimes disappear, in whole or in part. They can be drawn in—not that they are retractile in the sense that the horns of a snail are, but pretty much as the flaky edges of an oil drop are taken up and disappear in the globule. But this cousin of Actinophrys is really not himself, for he cannot possibly show off in this gastric slough. As we doubt not that the general habits of these cousins are similar, it will be well to tell what has been seen of Actinophrys when in its proper home. Suppose, as it is moving along upon some of its pseudopods, with the rest of them raised aloft, a giddy animalcule runs against one of them. Instantly it is held, as if glued to the pseudopod, which at once begins contracting, and drawing its captive to itself. Now the neighboring pseudopods bend over it, so that the object is entrapped, as it were, under an inverted basket. The prey is destined to be eaten alive. But has Actinophrys a mouth? No, that is, except at dinner time, when it makes itself a mouth for the occasion. Indeed, Actinophrys has a way of making mouths, more than manners, perhaps; and in this wise is it done. Under the prey, imprisoned by the bent pseudopods, and on the surface of the globular body of Actinophrys, a tiny depression begins. As this deepens the pseudopods contract, thereby pushing the prey into the depression. This done, the crater closes up, that is, the sarcode or protoplasm flows together, the prey is sunk into a sphere of living matter. Actual digestion sets in. Suppose it is a diatom that is captured, with its skeleton of siliceous, which even resists nitric acid. It cannot digest that. What then? Simply this, an opening, or vent appears at the surface. It may be at the spot where the prey was taken in, or it may be at another place. It seems to be indifferent where. The wonderful thing is that without inlet or outlet, the Actinophrys has taken in its oyster, and in a perfectly satisfactory way has digested the contents, and in a way equally comfortable has ejected the shell. So much for this singular creature, which seems the paradox of politeness, though often making mouths, yet never transgressing good manners.

With this part of our narrative but very partially told, we

must stop. We secured twenty-three rough pencil sketches of these almost infinitesimal living things. But we examined hundreds, and these only the merest fraction of the number contained in the mud which we found in the mollusk's gastric sack, as constituting its yet indigested food. These diatoms, and these Infusoria, what are they—possessing no apparent muscular fiber, yet performing the analogue of muscular motion; with no detected nerves, yet exercising functions which, in the higher sentient realms, require will? Is nature in her lowest realm of life fond of paradoxes? Strange to say with respect to the diatoms, science has attained the conclusion that they are lowly plants. As to the place in nature of the Infusoria there is serious discussion still. The weight of evidence is on the side of their animal nature, and so they are generally regarded. There are savants, however, who would relegate them to a middle kingdom, one between that of the animal, and that of the vegetable, thus assigning to them a border land of sentient life.

We have not yet done with Mya's sack of wonders, having reserved from our "finds" some curious things belonging to the inorganic world.

SAMUEL LOCKWOOD.



IN addition to the proposed Catholic University, at Paris, three others are to be established in France—one at Lille, where \$200,000 have been raised for the purpose; one at Angers; while the Jesuits intend to open one at Poitiers.

PERHAPS a gentleman is a rarer specimen than some of us think for. Which of us can point out many such in his circle; men whose aims are generous, whose truth is constant, and not only constant in its kind, but elevated in its degree; whose want of meanness makes them simple; who can look the world honestly in the face with an equal manly sympathy for the great and small? We all know now a hundred whose coats are very well made, and a score who have excellent manners, and one or two happy beings who are in what they call the inner circle and have shot into the very center and bull's-eye of fashion; but of gentlemen, how many? Let us take a little scrap of paper and each make out his list.—*Thackeray.*

A FALSE ISSUE.

POPULAR education is an outgrowth of our enlightenment.

Our free schools open an endless highway for the progress of intelligence. Whatever conflicts with the advancement of this intelligence is destructive to the best interests of the people, and should be overcome.

Politicians tell us that our free schools are in danger; that an element is developing among some of our people which shall abolish our school system, and bring the instruction of the youth under the surveillance of religious and sectarian bodies.

Indeed, the President thought it best to notice this subject in his last message. The State politicians speak eloquently of this question, embody the fundamental ideas of free schools in their platforms, and pat the people on the shoulder, telling them that the free schools shall not go down. But it would seem this is all for making capital whereby power can be gained and votes controlled. It is all for Buncombe.

Our free schools are not in danger, but are gaining strength and popularity even with those that were formerly enemies to public instruction.

This great cry of politicians that our schools must be preserved is a false issue sprung upon the country to make political capital, and must be considered as a *coup d'etat* of demagogues. More sensible would it be for them to spring the issue that the Mississippi River shall flow into the Gulf of Mexico.

If there be dissatisfaction with our school system, it originates from too much enthusiasm. Too much is brought into the schools to be taught to the mass of pupils. Natural science is usurping the place of common English branches in the grades below the high school. It will have its time, to be followed by something else: perhaps the teaching of agriculture and kindred subjects.

The school life of the average pupil is too short to learn what is marked out in "the course of study." It is to be regretted, yet it is, nevertheless, true, that the great mass of children leave school before they reach the age of twelve years.

Crowding out the common branches for the introduction of studies fitted for the higher grades may have brought our schools into disrepute with some ; but it is no foundation upon which to start an issue. Because Bismarck has seen fit to separate church and school, we need not be alarmed for the success of our public schools. Because Gladstone may deem it advisable to denounce Catholicism, we need not tremble lest the Catholics destroy our system of free schools. The Catholics have as much right to educate their children as the Methodists, or any other denomination, and no more. No religious body has the power to interrupt the on-flowing stream of popular education. Taxation, to support a system of free schools, is an outgrowth of our republicanism. So long as our free institutions are successful, so long will the schools flourish. Let politicians see that our Republic is kept intact. The government is the fountain head ; the schools the out-going stream. Protecting the stream will not cause the fountain unceasingly to flow ; but if the fountain be pure and exhaustless, the stream will make its own course, and will need no protection.

If politicians will sustain our Republic, free schools will need none of their solicitude.

D. H. PINGREY.



IT is a popular fallacy that the pale faces and broken-down constitutions found in our schools are due to hard study. If the habits of life of these so-called hard-workers could be traced, it would be found that late hours, unventilated sleeping-rooms, lack of exercise, exposure, rich food, or food that is poorly or unwisely cooked, fast eating, and the like, are the direct and the efficient causes of their poor state of health.

THE influence which the Johns Hopkins University will exert upon the educational interests of Baltimore and the State of Maryland, begins to be felt already. At a late meeting of the State School Commissioners, the relations between the public schools and the University were discussed, and several plans suggested by which they might be brought into closer relations. It is designed to so grade the educational institutions of the State that scholars can pass from the high schools to St. John's and Washington Colleges, and from these to the Johns Hopkins University.

“*DEAD LANGUAGES.*”

“**T**HERE was no light nonsense about Miss Blimber. She kept her hair short and crisp, and wore spectacles. She was dry and sandy with working in the graves of deceased languages. None of your live languages for Miss Blimber. They must be dead,—stone dead,—and then Miss Blimber dug them up, like a Ghoul.”

Dickens’s entertaining satire is generally taken, I suppose, to be a hit at the study of Latin and Greek in English schools. It is a fair hit, if we take it as aimed at the way Latin and Greek are often taught. And very possibly, without reflecting on it, some of us have owned the justice of it—so far, at least, that we have consented to call Latin and Greek “dead languages.” It seems to me worth while to look at this phrase a moment, and see how far it is true. For, in my opinion, these languages are not and never have been dead; and, if they were, it is not as dead languages that they should be taught—at least, to the beginner.

The case is simpler as regards Greek; for that is at this day so far a living language, that a tolerable Greek scholar can spell his way without much trouble in a newspaper of the day published in Athens. In this case, it is the body of the language—the vocabulary, with some necessary losses and gains—that has survived, the great change being in inflections and constructions; while even in these, as we are told, there is a strong tendency in the direction of the old Attic Greek. I presume that no native Greek could possibly admit that the language of Homer and Demosthenes has ever perished, or that it was not the same, in substance, that he is using now. Schliemann tells us that he moved a village audience in Ithaca to tears by reciting from the *Odyssey* the meeting of Ulysses and Penelope; while Xenophon and Plutarch, we are told, are still used as reading-books in the common schools of Athens.

As to Latin, the case is different. It has been seriously contended (as in Gardiner’s “*Music of Nature*”) that the spoken language of the Roman streets was never the classic Latin, and was in fact much nearer the modern Italian, which is its real representative. However this may be, the classic Latin lived

on, with slight modifications, in a very peculiar way,—different from Greek in that through all its modifications it held on to the inflections and the syntax by which it was conventionally distinguished from the *lingua rustica* of antiquity.

It may be convenient to bring together a few of the more obvious and well-known facts respecting the preservation of the classic Latin. In the Roman Church it has remained the only recognized language of theology, philosophy, and (I believe) diplomacy; the debates of these latter years on the Immaculate Conception and papal Infallibility being all conducted in that tongue. A few years ago—I believe until the temporary domination of the Magyars in 1848—it was the language of debates in the Hungarian parliament, and continued more or less in popular use. Thus a gentleman (who related it to me) traveling in Hungary about the year 1840 found himself at a misunderstanding with his stage-driver about the fare, which could not be cleared up till the latter tried him with *altera pecunia solvenda est*: he was claiming double fare. Down to near the end of the thirteenth century—except for certain beginnings of Romance dialects—classic Latin was the only literary tongue of western Europe. Dante wrote his serious essays in it, and Petrarch committed his permanent fame to it, apologizing for the use of the popular idiom in his lighter verse. At the time of DesCartes it had hardly ceased to be the language of philosophy; Newton wrote his “Principia” in it; and it continued the common language of universities and scholars to a still later day. Instruction in it, as late as the present century, began not with the study of grammars or classic authors, but with easy and familiar dialogue, so as to initiate the boy in the use of it in daily and common speech; while, still farther back, the knowledge of it was not even taught in college, but taken for granted in the student. And, with a far inferior acquaintance with the laws and theory of the language, this practice gave, doubtless, a far more genial and easy introduction to a knowledge of the Roman writers.

It will be noticed that this survival of Latin in modern times implies two distinct things: first, the study of it as a branch of learning and an accomplishment; second, the actual use of it as living speech for purposes of communication—business, discussion, conversation, etc. In the first, the main point to

be kept is the *purity* of the tongue, and the highest result aimed at is skillful imitation of the antique. In the other, the language must necessarily suffer those changes to which every living organism is liable. To some extent, these changes are those of mere corruption and decay, as illustrated in the barbarisms of a good deal of the monkish Latin, where the cause is pure ignorance and lack of culture. But, in other respects, the change is one of natural and legitimate development: sometimes growing out of the mere necessity of the case (of which an extreme instance will be the language of codes, diplomacy, and legal papers); sometimes it is the putting forth of qualities whose germs were already there unrecognized. Thus the rhyming and accented verse of the middle ages—as in the *Stabat Mater* for example—has been very fairly claimed as a native and genuine beauty superadded to the classic form of the language, not to be disowned as a barbarism, but accepted as an improvement. So, too, the development of Christian and modern thought has either introduced new terms or given new meanings to old ones, quite as properly belonging to Latin as the dialect of railroads and telegraphs (which would have been quite unintelligible to Burke) does to English; or as the rhyming fancies of Tennyson may take a place beside the blank verse of Milton.

Now I hold distinctly, as a matter of principle, that—if the usual conditions under which it is taught rendered it possible—*Latin should always be taught to beginners in this way*; that is, in what may be called its modern and still living forms. The life they retain may be very feeble, and the forms themselves may be full of faults when compared with the rigidly correct antique models. But I hold that nothing can compensate for the loss to the imagination that comes from the sense that one is dealing with lifeless forms.

I will not, however, dwell more on this—first, because every one will admit it in theory, with more or less of qualification, in case the choice were fairly open to us; and secondly, because, in fact, the usual conditions under which Latin is taught do *not* render it possible. Latin does not and ought not to occupy such a space in early education, that we can afford, in most cases, to follow the easy and natural slope. The ascent, for most learners, must be short and abrupt. Now and then, in the

case of a young bright child, or in the comparative leisure and freedom of a private school, it may be possible to deal with Latin in its simplicity, as living and flexible speech. And for the grown-up scholar, who thinks of the language in the broad way of its history, as ranging over at least 2,500 years, those later phenomena of its survival have an interest not merely and idly curious. In general, and for the business of our schools, it is both fair and necessary to fence off a part of this wide track—say fifty years before and after the founding of the Empire—and call that the domain of “pure Latinity,” with a broader belt each side of “classic” Latin, within which our studies shall be confined. Only, when we do it, let us understand that the fence-line—whatever reasons we have for setting it where we do—is but an arbitrary boundary. While within those limits we respect the local law, so as to make it the standard and model for our own practice, at least we should bear in mind that the law is but limited and local, and incidental to a broader law; as a botanist would find, in half a dozen feet cut from the limb of a tree, along with its own knots and veins, that life also which is in the trunk below and in the twigs above.

With this qualification, I do not see that even in the limited range of “classic Latin” it need at all to be regarded or taught as a dead language. The law of growth and development, which modern philology recognizes, is the law of LIFE of a language. Nothing is “dead” to the mind which is studied as the manifestation of a still-living law. Grammar, rightly understood, is not the *anatomy* of language, that is, the science of lifeless form; but its *physiology*, that is, the science of living function. The especial characteristic of later methods of study is, that they take their clue and guidance from the philologist. As the teacher gets the philologist's point of view, he learns insensibly to think of the language he teaches, as in a very real sense still living and flexible, within however narrow limits. The broadening and contracting of vowel-sounds, for example—the fundamental elements in our learned *Lautlehre*—are the same which difference a Scotch or Yorkshire dialect from Yankee; the same we hear from boys in the street for emphasis or derision; the same which the singing-master has to call attention to, that his class may deliver their voice properly.

Consonant changes are just what we are always stumbling into or creeping out of, by reason of careless use of lip and tongue. Even case-inflections, or the intricacies of indirect discourse, have something that answer to them in the way we feel out for ourselves the accurate expression of what we think or see.

As an intelligent teacher comes to feel this, he comes to see another thing—the reason why the true study of a language is never the study of a dead subject, but of a living organism. The laws of language are the laws of the human mind. In reasoning or in feeling our way from root to stem, and from that to inflectional forms, we are considering not a mere registered fact; we are following the path once taken by living speech, in order to make human thought vivid and intelligible—a vital process, requiring only to be vitalized in our mind. The laws of syntax are laws of elementary logic. The constructions of syntax are first lessons in intellectual philosophy. One of the best grammarians I have known finds his keenest interest in studying the history of ancient speculation, which tells, in a wider way, the same story found in the historic sequences of comparative philology. The same thing which makes the difficulty and the cruelty of technical syntax to a school-boy is also that which makes its great value to him when he has once mastered it—that it is his first essay in metaphysics, his first step in the study of the laws of human thought, his initiation in the outer portals of the temple which enshrines the deepest and the highest truth known to the human intellect.

JOSEPH H. ALLEN.

THE continued starvation wages of teachers are certainly no sign of progress, although little increase of salary in any profession can be expected at present. It is cheering, however, to see such decided opposition as is proposed by the *Baltimore American*: "Better never learn to spell and read, but try politics, get sent to the Legislature or City Council, or be made constable, all of which pay better than, as Daniel Webster says, 'burning out your own light while giving light to others.' We know nothing better than to advise the profession to 'make a strike.' Then, perhaps, it may be less than a century before teachers' salaries are raised again."

THE JAPANESE INDEMNITY AND EDUCATION.

THE United States has now the best opportunity it will ever have to show the genuineness of its expressions of good-will to Japan. By a convention made in 1864, when Japan was still in a state of popular ferment over the foreign question, we exacted \$750,000 from her on the pretext of damages and expenses caused by a rebellious vassal. Apparently some mistake was made in the accounts, for all our damages and expenses have long since been paid, and only reached the sum of \$42,000. The handsome surplus, with its accumulations of interest, now amount to more than a million of dollars. It is not in our treasury, but has been left in the charge of the Secretary of State.

Now is the time to turn this money to good account. Japan needs this fund for educational purposes. She will never ask for it, but, none the less, it ought to be given back to her. For the current year the usual appropriation to education had to be cut down by \$300,000, on account of the financial condition of the country. Japan is striving to develop her resources, and to secure the blessings of Western learning and Western arts. We have made great professions of sympathy and appreciation. Let us not belie these professions by taking from her the very means she requires to carry on her plans.

Three years ago a memorial was sent to Congress asking that this indemnity should be restored. It was signed by the faculties of almost every college in the United States, and by every educator to whom it was presented. The House of Representatives took favorable action, but it was not reached in the Senate. It is not yet too late, now, for our present Congress to do this act of international courtesy, and to show that we regard the education of Japan her surest means of attaining national prosperity.

DR. JOHN HALL uttered this golden sentiment in one of his Yale lectures: "The best way for a man to get out of a lowly position is to be conspicuously effective in it." Here is opportunity for the humblest teachers and workers.

THE INTER-COLLEGIATE LITERARY CONTESTS.

AWARD OF PRIZES.

THE annual oratorical contest of the Inter-collegiate Literary Association took place recently at the Academy of Music in this city. The first prize in oratory was awarded to Julian M. Elliot, of Hamilton College; the second to D. J. Tompkins, of Cornell University.

The reports of the judges on essays, and of the examiners in the Greek and mathematical competitive examinations, which were held last month, were announced as follows: One prize for an essay was awarded to F. E. Heath, of Cornell University—subject, “Dickens and Thackery Compared.” One prize, for the best essay on “Advantages and Disadvantages of Universal Suffrage,” was divided between Nelson S. Spencer, of the College of the City of New York and F. A. Hills, of the Northwestern University of Illinois. The prize of \$100, offered by Mr. Gregory, of Marblehead, Mass., for the best essay on “Arbitration,” was awarded to Wilbur Lawrence, of the College of the City of New York.

In mathematics the first prize was awarded to George S. Palmer, of Cornell University; the second to G. B. Halstead, of Princeton College; and honorable mention was made of Thomas Craig, of Lafayette College.

In Greek the first prize was awarded to Miss Julia J. Thomas, of Cornell University; the second to Henry Veghte, of Rutgers College; and honorable mention was made of H. E. Crosby, of the University of the City of New York.



EDUCATION has made some progress in South Carolina. There are 110,416 children in actual attendance upon the free schools, almost one half of the school population of the State. An effort will be made during the present session of the Legislature to extend the average period for keeping open the schools from four and a half months to six months in each year.

CURRENT PUBLICATIONS.

IN the publication of Dr. Van Lennep's "BIBLE LANDS; their Modern Customs and Manners Illustrative of Scripture,"¹ Messrs. Harper have put before the public a volume of remarkable value and interest, the most valuable contribution to the collection of works on the lands of the Bible issued since Dr. Thomson's "The Land and the Book." The author, himself a Syrian by birth, highly educated both in this country and Europe, and for many years a missionary in the countries which he describes, has portrayed, with rare fidelity and simplicity of style, the manners and customs of the Orientals at the present day; and as there are fewer changes in the habits and customs of these people in the course of the centuries, than among any other nations in the world, these descriptions throw a flood of light upon the Scriptures. No man living was so capable of doing this work well as Dr. Van Lennep, and the book, with its abundant and beautiful illustrations, will be a text-book of standard value to all clergymen, superintendents, Sunday-school and Bible-class teachers, and to all families interested in coming to a better understanding of the Holy Scriptures. We have never seen a work we could recommend more unqualifiedly.

"George Washington; or, Life in America One Hundred Years Ago," by John S. C. Abbott,² seems to be one of a series entitled "American Pioneers and Patriots." It is written in a pleasant, easy style, and will fascinate the young. And surely it will profit them far more than the "Dime Novels" of the day. It will tend to cultivate that patriotism which is, we fear, in great danger of dying out. As we are about to celebrate our Centennial, it is fitting that the young should learn more of "the Father of his country."

The same publishers³ have issued, in a very readable style, "Two Lectures upon the Relations of Civil Law to Church Polity, Discipline, and Property," by Hon. William Strong, LL.D., Justice of the Supreme Court of the United States.

(1) BIBLE LANDS; their Modern Customs and Manners Illustrative of Scripture. By Rev. Henry J. Van Lennep, D.D. New York: Harper & Brothers, 1875.

(2) (3) Messrs. Dodd & Mead, publishers.

A REVIEWER REVIEWED.

A FEW days since, there was sent me a number of this Journal, containing a violent onslaught upon Allen's Latin Primer.* It is a piece of criticism against which, in the interests of sound scholarship, which, I suppose, this Journal has at heart, I must vehemently protest. Its tendency can only be to foster a conceit of scholarship founded on a very narrow acquaintance with Latin literature.

The tone of the criticism is also one which is very offensive to me, on account of the personal reflections that run through it. The name of the author criticised is repeated in almost every other sentence, and ignorance is imputed to him in very unmistakable language; while at the end, there is a little italicized double-edged blow at Mr. Allen and Harvard College, which seems altogether uncalled for.

The avowed object of the critic is "to look over the productions of American authors which are in greatest request in the schools, and to consider what are the essentials of an elementary course."

Now, the book in question is, from its nature, entirely outside of any regular series of instruction preparatory for college, and is intended for very young children—a kind of Kindergarten book, and was noticed as such in the *Nation*, several years ago, when it appeared. So that the critic's strictures do not really belong under this heading at all, but are, in fact, from the very first, an attack upon the author of the book personally. Now, whatever may be my own opinion of the book, I have noticed so many clear errors in the criticism, that I cannot avoid calling attention to them.

It seems the more necessary to answer the points from the fact that many of them are founded on generally recognized rules, which, however, are strained beyond the exactness of the authors themselves, from whose works they are supposed to be made. Again, many of them are founded apparently on the idea of following none but Ciceronian usage, which seems to me utterly absurd in such a composition as the one under discussion.

No. 1. This seems well taken. Still, I have been too often puzzled in earlier years by odd connections of clauses in ancient Latin authors, to be much disturbed by such a connection in a modern one. An equally abrupt change of subject has not prevented editors from accepting the reading *Rectina-orabat*, "Pl. Ep.," vi. 16. As to the tense of *peperit*, the critic is probably right, but how he can be so certain without the original is hard to see. It seems as good *Latin* to say that a hen laid golden eggs on one occasion every day for a week, as that she was in the habit of laying them.

No. 2 a and b. These are disposed of by Hor. "Sat.," I. iv. 10. And besides, what is meant here is not one instead of the other, but one instead of two, in which case *altero* would not be correct. The implication about the bird having only one foot is, of course, a creation of the critic's brain. At any rate, Horace never thought of it. The learned discussion in b is also made ludicrous by the Horatian expression. In regard to *uno*, compare also Cic. "N. D.," III., iii. 8.

c. The expression is certainly a little queer in Mr. Allen's version, but Cicero says *mentum deponere in gremiis mimarum*, "Phil.," XIII. xi. 24.

d. The construction is, perhaps, not Ciceronian, but seems to be in Plautus.

3 a. Seems well taken.

b. Is certainly not sound. If the English expression is analyzed, it must mean "I have no right to ask you, it is true, but I venture," etc.—a relation which *sed* is constantly used to express.

4. Contains one obvious error of the critic. *Locuta esset* is correct, for though the hen had been talking, yet she had not been talking *impudenter*, which is the point in question. For an extreme case, see *quæcumque causa vos huc attulisset letarer*, "Cic. de Or.," II. iv., where they had "come" and he was "glad." Yet still the construction is contrary to fact.

Mundi consuetudines is certainly not Latin, unless medieval Latin can be used, which I should not myself approve. I cannot say I ever saw the plural *consuetudines* in this sense, yet very likely it occurs.

The critic's rendering is correctly dull and loses the point. I am a little suspicious of *num*, which means, "You don't—do you," which is not the idea at all. Yet I will take warning by the critic, and not criticize his Latin.

* The writer evidently intends to allude to the article entitled ELEMENTARY INSTRUCTION IN LATIN in our MONTHLY for December, 1875.

5 a. Is absurd. If no plan is mentioned, certainly it is not the *translator's* fault but the *author's*, and, in fact, there is one, as appears by the context.

b. The usage suggested is certainly more common, but not exclusive.

c. See *Quis ignorat qui modo unquam*, etc. Cic. pro "Flacco," xxvii. 64.

d. There is a negative implied. Perhaps, however, the critic does not get the idea here, being misled by the plural *gallinæ*. It is evidently implied that such a thing never happened before, which is entirely lost in his rendering.

e. As the critic must be aware, the subjunctive of characteristic (see "Ros. Am.," xviii., *Nunc dicis*, etc.) is of the same character as the subjunctive of result, and is usually classed under it. The rules given are only the most general ones, and, under the general head "result" will be found this kind of subjunctive.

f. Seems sound. Yet it is hard to say it never occurs. If I said so myself, I should expect to run across it the next day.

6. *Factum sit*, etc., is, doubtless, more elegant, but, certainly, is not necessary. See Plant. "Capt. Prol.," xxiii., *Rationem habetis quo modo unum amiserit*.

7 a. The rule is undoubtedly as stated, and Mr. Allen's use is medieval. Yet, even in good Latin there are many cases of the use of *immo* where the negative idea cannot be detected.

7 b. Terence says *istæc res est* ("Adelphi," III. iii. 64). Why not *hæc res*?

8 a. The use of *consulo* in this way is only medieval.

8 b. This criticism is another labored and learned error. See Cic. "De Oratore," I. xxix. 131. *Me . . . rem militarem jubes discere*. Compare Ter. "Ad.," I. ii. 45.

9 a. Another mistake. See Ter. "And.," I. i. 83, *sic cogitabam*, etc.

b. True, it cannot be used, nor is it so used here. And in this connection the question becomes pertinent why the punctuation is changed. In the original, the dash after *diebus* shows that, as often in conversation, there is an ellipsis, and that the preceding words stand for a clause. As we should say "one egg a day . . . that is not enough," i.e., "that she should lay one," etc.

c. The critic does not pretend that his rule is universal, and, in fact, this form is constantly used in comedy.

d. This is, doubtless, very good Latin, but it has the fatal effect of losing all the vivacity of the original.

e. The critic's remark is certainly untrue. The imperfect in this construction refers to *present* time regularly, though sometimes also to past time in regard to a continued action. Compare Cic. "Ad. Att.," II. i., *Si mihi omnes, ut erat æquum, faverent*. So "Manil. Law.," xvii. 50, *erat deligendus*. It is true that it is a little more natural to say *satius est*, "it would be better" (if I should), yet it is perfectly good Latin to say *satius erat*, "it would be better" (if we could, or if it were so), implying the contrary.

10 a. Another superfluity of learning. Compare "Ov. Met.," I. 65, *Scythiam septemque tribum horripens invasit Boreas*. If Boreas could, why not the birds?

b. Must, I suppose, count one for the critic.

c. This is, certainly, hypercritical. Nothing is so loose as the connection of sentences in dialogue. See Terence *passim*.

d. *Alias*, in this sense, is certainly rather late, but not unknown.

e. In the first place, the idea of cause and consequence in *cum* temporal has long been exploded. See the grammar of Lattmann & Müller, the one most commonly used in Germany, and Hoffman's *Die Lateinischen Zeitpartikeln*.

And in the second place, the indicative may be entirely sound here, as referring to a *particular* time, when he was out of the country, which would be a perfectly legitimate view of the English. See *pro Sest.*, xxvi. 56, for an indicative imperfect in this use.

f. This is seen to be wrong by Cic. "Acad.," II. xvi. 141, *Nec me . . . putaveris*.

g. A declarative sentence is not here coordinated with an imperative, but with the supposed *inquit*, which introduces it. Moreover, *et* is used to connect sentences in all sorts of relations. I do not care to prove by an example that this is a mistake of the critic's, but I have no doubt one could be found.

h. The word is late Latin, and is marked as such by an asterisk in the vocabulary. The "coining" may or may not be good taste, but certainly it shows no want of scholarship.

11 a. The word seems to be a slip of the author—natural enough for anybody in haste. See Richard Grant White on Heterophemy.

b. The rule of the critic is sound but not exclusive.

c. Cicero seems not to have "had the slightest idea about the meaning of *alter*," any more than the critic's unfortunate victim. See Cic. N. D., I. xvii. 45, *Nec habere ipsum, negotii*

quoquam nec exhibere alteri. The use of the word in the comedians needs no illustration. See also "Livy," xxi. 13.

d. (a.) This criticism is answered by the last citation.

(b.) Is later and poetic, it is true, but not un-Latin.

12 a. Why *poetridie*? The original does not say the next morning, but simply in the morning. And again, see Plin. Ep., l. 5, *Rogo mane videas Plinium domi, sed plane mane neque enim diutius ferre sollicitudinem possum.* b. As to *dum* with the imperfect, the received text in "Livy," x. 36, *dum hæc gerebantur* is sufficient excuse for any ordinary writer, unless he is to be required always to write Ciceronian Latin. c. The thing opposed to *ceteri* is obviously the *ben* in question referred to as *ea* in the preceding sentence. Are we to understand that the opposition is always to be expressed?

13. No doubt the perfect is much better, yet especially in the comedians the imperfect is constantly used where by all the rules we should expect the perfect.

14. Here seems to be a "bad blunder" of the critic in making the sequence of tenses depend on *videat*. Of course, *imperial* governs, and as it is historical present, may have either or both constructions. See Roby "Lat. Gr.," 1511-14, and especially Clc., in "Verr.," II. xv. 38 (Act II. Lib. II.), a case precisely like this, except that the clause is relative instead of interrogative *Adversarii postulant, ut . . . dentur, quæ convenirent.* By the way, the little snub administered by the critic in this passage seems to be a boomerang that comes back harder than it went.

b. Here the critic seems to have the right, though it is a trifle. The word *pario* is used so loosely that it might well be employed here, though not meaning strictly hatch. I wonder the critic did not suggest the real technical word, *excludo*.

15 a. The criticism on *vire, vale* is simply absurd. See the two places in Horace, "Sat.," II. v. 110, and "Ep.," I. vi. 67, where the expression occurs.

b. I fear I shall have to give the critic the benefit of this criticism for want of time to hunt up an example. Yet I have come to distrust the critic's *nevers*.

As I have frequently cited Plautus and Terence, I ought to call attention to Pliny's judgment of their Latinity. Speaking of a friend, whose style he praises, he says ("Ep.," l. 16), *Legit mihi nuper epistolas quæ uxoribus esse dicebat. Plautum vel Terentium metro solum legi credidi, quæ sive uxoribus sunt ut affirmat sive ipsis ut negat pari gloria dignus est quæ,* etc. This quotation shows that the language of conversation retained much more freedom, as well as an antique flavor, which the Ciceronian rhetoric does not represent, and that to apply the Ciceronian canon to conversational Latin is to be more Latin than the Romans themselves, a fault not uncommon among scholars now that Latin is not an ordinary means of communication.

In fact, it is sometimes very hard to say where to draw the line between allowable and unauthorized Latin. I am inclined to think the rules ought to vary much according to the nature of the composition, and that in many styles one might range all the way from Plautus to Suetonius. Perhaps one might even wink at a medieval expression now and then in a child's book of this kind. But, however this may be, out of FORTY-FIVE numbered points made by the critic, I have shown that TWENTY-FIVE are absolute mistakes on his own part. Of the remaining twenty, more than half are quite excusable, if one considers the plan of the book, and none of them anything more than mere slips. It seems to me that this is rather a poor showing for so fierce a criticism. The blunders of the critic are obviously more numerous, in fact two to one, worse in kind, and far more pretensions than those of the author, so that he would do well to examine farther before he "looks over the productions of American authors" any more.

J. B. GREENOUGH.

CAMBRIDGE, MASS.

In returning proof of above, Prof. Greenough remarks, "I must say I cannot help noticing the small obscure print in comparison with the capitals and blazonry of the original article. Perhaps, however, it isn't true even in advertising that the largest letters are most read."

This leads the editor to explain that Book Reviewing is a part of the regular work of this MONTHLY; and the regular type is used in setting up the reviews. We can regulate the space devoted to reviews by rejecting such as we have no room for. But all responses, however long, from authors who may feel aggrieved, we *must print*, or be accused of *unfairness*. Moreover, all our readers may not be specially interested in any one subject. Hence, we have adopted this type for all such discussions.

If Prof. Reiley, or any other person, may have a desire to discuss questions growing out of our reviews, it must be in this type.

Prof. Greenough is quite right in his last remark. The size of type will not affect the argument. The great Goliath was slain by a very small stone, thrown by a small man, directed to the right spot.

EDITOR.